salmeterol/fluticasone, beclametasone/formoterol, budesonide/formoterol (free adjustable combination) and conventional best practice. **METHODS:** For construction of pharmacoeconomic model a set of comparative randomised controlled trials for each therapeutic alternative were identified. From them data on clinical effectiveness in form of asthma exacerbations avoided for 1 patient-year were extracted. The analysis was conducted from the perspective of Russian health care system. Respectively the cost of the following resources was accounted: alternative compared, concomitant pharmacotherapy, cost of hospitalizations, cost of ambulkatory visits. Analysis was performed in the form of cost-effectiveness analysis the exacerbation prevented being the measure of effectiveness. **RESULTS:** The data of the research illustrates that budesonide/formoterol maintenance and reliever therapy for asthma patients provides a significant health improvement from the perspective of preventing exacerbations. Simultaneosly budesonide/formoterol maintenance and reliever therapy demonstrates better cost-effectiveness than alternatives compared. The CER index in relation to cost of asthma control during the year (absence of exacerbations) for budesonide/formoterol maintenance and reliever therapy was 147785 rub. respective figures for salmeterol/fluticasone, beclametasone/formoterol, budesonide/formoterol (free adjustable combination) and conventional best practice were 383622 rub., 169245 rub., 227592 rub., 219233 rub., respectively. **CONCLUSIONS:** Budesonide/formoterol fixed combination for maintenance and reliever therapy turned to be cost-effective therapeutic alternative for asthma control in adult patients in conditions of Russian health care system.

PRS27

ECONOMIC ASSESSMENT OF GEMIFLOXACIN FOR THE MANAGEMENT OF ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN MEXICO

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OBJECTIVES: Acute exacerbations of chronic bronchitis (AECB) are a leading cause of morbi-mortality and medical resources consumption. This study was aimed to estimate the economic and health consequences of first line antibiotics in the management of AECB and it´s recurrences, under the setting of a representative Mexican health care institution. **METHODS:** Two models were developed: a decision tree for acute events (tree month horizon) and a two-state, one-quarter cycle Markov for recurrences (one year horizon). The competing alternatives (listed in the national formulary) were: moxifloxacin 400 mg/day, levofloxacin 500 mg/day, ceftriaxone 1000 mg/day, clarithromycin 1000 mg/day, cefuroxime 1000 mg/day and, not listed in the national formulary, gemifloxacin 320 mg/day. The clinical success rate and months free of recurrences (effectiveness measures) were extracted from international literature. Resource use was extracted from 117 clinical files (adult patients) treated at Instituto Mexicano del Seguro Social (IMSS).The cost of antibiotics were extracted from IMSS´s sources (except of gemifloxacin, provided by the manufacturer); the unit cost of physician visits, diagnostic tests, emergency room, in-patient, intensive care unit were the official for IMSS. Costs are expressed in 2012 U$. One-way sensitivity analysis was performed. **RESULTS:** The clinical success rates were between 97.5% (gemifloxacin) and 83.1% (cefuroxime), the costs per patient-per AECB were proportional: $3,375.6 (gemifloxacin) and $4825.1% (cefuroxime), gemifloxacin dominated progressively ceftriaxone, moxifloxacin, levofloxacin, clarithromycin and cefuroxime. Regarding AECB recurrences, clarithromycin represented the highest cost and lowest time free of recurrence: $8198.99 and 10.28 months, respectively, whereas gemifloxacin represented the opposite: $3,325.73 and 11.015 months, respectively. The length of stay were between 6.22 (gemifloxacin) and 10.3 days (cefuroxime). The results were robust to +10% acquisition cost, +5% adverse events incidence and -5% clinical success rate for gemifloxacin. **CONCLUSIONS:** At IMSS setting, gemifloxacin is an alternative that would promote savings in the treatment of AECB and it´s recurrences.

PRS28

LONG-TERM HUMIDIFICATION THERAPY IMPROVES QUALITY OF LIFE AND IS COST EFFECTIVE FOR PATIENTS WITH COPD OR BRONCHIECTASIS

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OBJECTIVES: To evaluate the cost effectiveness of long-term therapy with high flow humidified air supplemented with oxygen as required at 37°C delivered through nasal cannulae (long term humidification therapy; LTHT) for patients with moderate or severe COPD or bronchiectasis. **METHODS:** The source was a 12-month clinical trial showing that LTHT at a mean duration of 1.6 hours per day reduced exacerbation days and improved quality of life assessed by the St. George's Respiratory Questionnaire compared to usual care alone. Resources included the LTHT intervention equipment and consumables, relevant hospital admissions, general practitioner consultations, Emergency Care presentations and pharmaceuticals. Details of consultations and medication usage were obtained from patient diaries and hospital admissions from retrospective administrative records. Utility values were obtained indirectly from the St Georges Respiratory Questionnaire using a published algorithm. The ICUR was estimated over the lifetime of the device (5 years) using the bootstrap method with 5000 replications. Future costs and benefits were discounted at 3.5% per annum. **RESULTS:** The incremental health state utility over 12 months was estimated at +0.084 (95% CI 0.003-0.165). Annual costs excluding the intervention were NZ$2329 (95%CI $1249, $3409) for the treatment group and NZ$3477 ($712, $6241) for the control group (nsd). With the LTHT intervention costed at $10,461 over the lifetime of the device (5 years) the cost per QALY was NZ$15,615 (95%CI $15,521, $15,709). At a willingness to pay (WTP) threshold of NZ$30,000, the probability of LTHT being cost effective was 89% and at a WTP threshold of $20,000 it was 71%, ranging from 64% to 77% as the 5-year cost of LTHT equipment and running costs was varied by ±20%. **CONCLUSIONS:** Long term humidification therapy for moderate to severe COPD or bronchiectasis is as cost effective as most new pharmaceuticals that are reimbursed by the New Zealand government.

PRS29

SECOND-LINE THERAPY IN CHILDREN WITH ASTHMA IN COLOMBIA: AN ECONOMIC EVALUATION TO INFORM THE NATIONAL GUIDELINE

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INTRODUCTION: Childhood asthma is a major public health problem in Colombia as in many other countries. In patients entering the second line therapy, options in the 5-11 years old category are increase corticosteroids, add LABA or add LTRA. In under five years old adding LABA is not an option. There are differences in cost and efficacy between these options, to address this issue an economic evaluation was done in the context of the National Colombian Clinical Practice Guidelines Programme in collaboration with the Colombian Pediatric Pneumonology Association. **OBJECTIVES:** To evaluate the cost effectiveness of the second line asthma therapy options in pediatric patients in Colombia. **METHODS:** A Markov model was developed including the following health states: controlled asthma, uncontrolled asthma, ambulatory exacerbation, exacerbation with hospitalization and therapeutic failure. A restringed social perspective was used (health system + out of pocket expenses) with a 3 months time horizon. Transition probabilities and utility estimates were derived from international literature and validated by a Delphi panel with local Colombian experts. Costs were provided by the Colombian MoH. A deterministic and probabilistic sensitivity analysis was performed. **RESULTS:** The LTRA option was dominated, being more expensive and less efficacious than increasing corticosteroids in both age categories. In the 5-11 years old the ICER comparing LABA with corticosteroids was 4.366.343 Colombian pesos (COP) per quality adjusted life week (QALW) gained. This ICER is far above the 634.000 COP per QALW estimated for a 3 GDP threshold. In the sensitivity analysis these results probed to be robust being necessary a 4.400.000 COP per QALW of willingness to pay for the LRTA option to start being cost effective. **CONCLUSIONS:** Increasing corticosteroids was the most cost effective option in asthmatic pediatric population in Colombia compared to LABA, being LRTA dominated or far above the Colombian thresholds.

RESPIRATORY-RELATED DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PRS30

ASSESSMENT OF ADHERENCE TO INHALED CORTICOSTEROID TREATMENT FOR ASTHMA: A CROSS-SECTIONAL STUDY FROM DELHI, INDIA

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OBJECTIVES: Despite the known importance of regular use of inhaled corticosteroids (ICS) for asthma control, there is a dearth of adherence literature from India. The study aims were to (i) evaluate patients' self-reported adherence to ICS therapy, (ii) identify possible reasons for non-adherence, and (iii) identify possible correlations between ICS adherence, medicine beliefs and socio-demographic factors of asthma patients. **METHODS:** Adults with previously diagnosed asthma (n=200) presenting to the emergency room (March 2009-December 2009) of a public chest hospital in Delhi for asthma exacerbation completed an interviewer-administered questionnaire on socio-demographics, clinical history, self-reported adherence, beliefs about causes of disease, medicine beliefs and medication adherence after stabilization of their condition. **RESULTS:** Study sample had 51.5% patients in the age group of 30-40 years, 54.0% females, 10.0% illiterate, and 62.5% patients earning less than INR 10,000/month ($185/month). The mean duration of registration with the study hospital was 5.4±4.4 years and all were prescribed ICS treatment. Self-report on adherence: 49% took medicines even without symptoms; 91.0% reported they forgot to take their medicine "some or lot of times"; 84.0% avoided medicines "some of the times". Important reasons for avoiding medicines were no symptoms (59.5%), cost (34.5%), fear of getting dependent (29%), side effects (17%) and social inhibition (14.5%). Correlation between self-reported adherence and demographic factors, such as age, sex, education and income was calculated. The commonly endorsed causes for asthma were pollution (33.5%), poor medical care in the past (15.5%), heredity (8.5%), cold climate (7.5%), and diet (5.5%). Non-adherent behaviors were associated with doubts about the necessity of medication and concerns about its potential side effects with long-term use ($r=-0.299$, $p<0.001$). **CONCLUSIONS:** Adherence to ICS therapy is poor and many factors modulate adherence to therapy. These findings lend preliminary support for an extended self-regulatory model of treatment adherence, which incorporates beliefs about treatment.

PRS31

ADHERENCE AND SATISFACTION WITH ORAL VERSUS OTHER TREATMENTS AMONG PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) IN THE U.S. 2012 NATIONAL HEALTH AND WELLNESS SURVEY